a first threaded screw drive assembly connected to one of said first and second plates including a threaded screw drive, a gear mechanism connected to said threaded screw drive, and a controlled drive operatively connected to said threaded screw drive via said gear mechanism for positioning said one of said first and second plates.

18. The apparatus of claim 17, wherein said first threaded screw drive assembly comprises a plurality of screw drive assemblies connected to said one of said first and second plates.

19. The apparatus of claim 17, further comprising a second threaded drive screw assembly, wherein said first threaded screw drive assembly is operatively connected for positioning said first plate and said second threaded screw drive assembly is operatively connected for positioning said second plate.

20. The apparatus of claim 17, wherein said threaded screw drive comprises a spindle nut connected to said one of said first and second plates.

21. The apparatus of claim 17, wherein said threaded screw drive comprises a threaded spindle connected to said one of said first and second plates.

22. The apparatus of claim 17, further comprising a mold insert having a second negative form of the molded part to be produced and arranged in said first and second plates and a second threaded screw drive assembly connected for positioning said mold insert.

23. The apparatus of claim 17, further comprising a die arranged in one of said first and second plates having said first negative form, wherein said threaded screw drive is connected to said die.

24. The apparatus of claim 17, further comprising heating elements arranged in said first and second plates.

25. The apparatus of claim 17, wherein said gear mechanism is a planetary gear mechanism.

26. The apparatus of claim 17, further comprising at least one ejector arranged in said threaded screw drive assembly.

27. A method for injection-compression molding a molded part, comprising the steps of:

a. injecting a molding composition into a cavity of the mold defined at least partially by a plate having a negative form of the molded part to be produced;

b. moving the plate of the mold having a negative form of the molded part to be produced for compressing the molding composition via a threaded screw drive assembly; and

c. controlling the movement of the plate in said step b. by one of a movement program and in dependence on a process parameter.

28. The method of claim 27, wherein said step c. comprises controlling the movement of the plate in dependence on a pressure present in the mold.

29. The method of claim 27, wherein said step c. comprises controlling the movement of the plate in dependence on a power consumption of a motor driving the threaded screw drive assembly.

30. The method of claim 27, wherein said step c. comprises controlling the movement of the plate in dependence on a force on the threaded screw drive.

31. The method of claim 27, wherein said step b. comprises moving the plate via a step by step motion.

32. The method of claim 31, wherein said step b. comprises moving the plate in a step by step motion comprising steps of less than 1 micrometer.